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Remarks

In view of the following discussion, the applicants submit that the claims now pending in the application are not obvious under the provisions of 35 U. S. C. § 103. Thus, the applicants believe that all of these claims are in allowable form.

REJECTIONS**A. 35 U. S. C. § 103**

1. Claims 1-2 and 5-7 are not obvious over Safran et al. in view of Keelan et al.

Claims 1-2 and 5-7 stand rejected under 35 U. S. C. § 103(a) as being unpatentable over Safran et al. (U. S. Patent Application Publication 2003/0058416 published March 27, 2003) in view of Keelan et al. (U. S. Patent 5,537,166 issued July 16, 1996). The applicants submit that these claims are not rendered obvious by the combination of these references.

Claim 1 is directed to a projection system (see, specification at page 1, lines 9-10). The projection system 100 has a plurality of displays 111A, 111B, 111C, 111D arranged adjacent to each other to form a screen, a plurality of projectors 110A, 110B, 110C, 110D, one corresponding to each display of the plurality of displays, wherein each projector includes a lens 130 (see, specification at FIGS. 3-4 and page 2, lines 20-23). A mask assembly 140 is disposed between and surrounding each lens 130 of the plurality of projectors and the corresponding plurality of displays (see, specification at FIGS. 4-5B and page 2, line 24-28 and page 3, lines 1-6).

Safran et al. describes a multi projector system (see, Safran et al. at page 1, paragraph 0001). In Safran et al., output from a plurality of projectors 20 is

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projected onto a plurality of corresponding screens 30 (see, Safran et al. at FIG. 1A and page 3, paragraph 0029).

Safran et al. does not describe or suggest a projection system including a plurality of displays arranged adjacent to each other to form a screen, a plurality of projectors, one corresponding to each display of the plurality of displays, wherein each projector includes a lens, and a mask assembly disposed between and surrounding each lens of the plurality of projectors and the corresponding plurality of displays. Rather, Safran et al. only describes a multi projector system in which output from a plurality of projectors is projected onto a plurality of corresponding screens. Since, Safran et al. does not describe or suggest a projection system including a plurality of displays arranged adjacent to each other to form a screen, a plurality of projectors, one corresponding to each display of the plurality of displays, wherein each projector includes a lens, and a mask assembly disposed between and surrounding each lens of the plurality of projectors and the corresponding plurality of displays, claim 1 is patentable over Safran et al.

Keelan et al. describes an external aperture on a lens of a slide projector (see, Keelan et al. at FIG. column 1, lines 5-7). The size 12 of the external aperture 10 on the lens controls center to edge sharpness uniformity of an individually projected image (see, Keelan et al. at FIG. 1 and column 2, lines 36-47).

Keelan et al. does not describe or suggest a projection system including a plurality of displays arranged adjacent to each other to form a screen, a plurality of projectors, one corresponding to each display of the plurality of displays, wherein each projector includes a lens, and a mask assembly disposed between and surrounding each lens of the plurality of projectors and the corresponding plurality of displays. Rather, Keelan et al. is not applicable to a multi-projector system since this reference only teaches an external aperture on a lens of a slide projector in which the size of the external aperture on the lens controls center to edge sharpness uniformity of an individually projected image. Since, Keelan et al.

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does not describe or suggest a projection system including a plurality of displays arranged adjacent to each other to form a screen, a plurality of projectors, one corresponding to each display of the plurality of displays, wherein each projector includes a lens, and a mask assembly disposed between and surrounding each lens of the plurality of projectors and the corresponding plurality of displays, claim 1 is patentable over Keelan et al.

Furthermore, since Safran et al. only describes a multi projector system in which output from a plurality of projectors is projected onto a plurality of corresponding screens and Keelan et al. is not applicable to a multi-projector system since this reference only teaches an external aperture on a lens of a slide projector in which the size of the external aperture on the lens controls center to edge sharpness uniformity of an individually projected image, the combination of these references does not describe or suggest applicant's arrangement recited in claim 1. In particular, claim 1 describes a projection system including a plurality of displays arranged adjacent to each other to form a screen, a plurality of projectors, one corresponding to each display of the plurality of displays, wherein each projector includes a lens, and a mask assembly disposed between and surrounding each lens of the plurality of projectors and the corresponding plurality of displays. Thus, claim 1 is patentable over the combination of these references.

Claims 2 and 5-7 depend either directly, or indirectly, from claim 1. For the same reasons as stated above for claim 1, claims 2 and 5-7 are also patentable over Safran et al. in view of Keelan et al.

2. Claims 3-4 are not obvious over obvious over Safran et al. in view of Keelan et al. and further in view of Yamanaka

Claims 3-4 stand rejected under 35 U. S. C. § 103(a) as being unpatentable over Safran et al. (U. S. Patent Application Publication 2003/0058416 published March 27, 2003) in view of Keelan et al. (U. S. Patent

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5,537,166 issued July 16, 1996) and further in view of Yamanaka (U. S. Patent 6,637,887 issued October 28, 2003). The applicants submit that these claims are not rendered obvious by the combination of these references.

Claim 3 depends from claim 1 and is directed to a projection system (see, specification at page 1, lines 9-10). The projection system 100 has a plurality of displays 111A, 111B, 111C, 111D arranged adjacent to each other to form a screen, a plurality of projectors 110A, 110B, 110C, 110D, one corresponding to each display of the plurality of displays, wherein each projector includes a lens 130 (see, specification at FIGS. 3-4 and page 2, lines 20-23). A mask assembly 140 is disposed between and surrounding each lens 130 of the plurality of projectors and the corresponding plurality of displays (see, specification at FIGS. 4-5B and page 2, line 24-28 and page 3, lines 1-6).

Safran et al. describes a multi projector system (see, Safran et al. at page 1, paragraph 0001). In Safran et al., output from a plurality of projectors 20 is projected onto a plurality of corresponding screens 30 (see, Safran et al. at FIG. 1A and page 3, paragraph 0029).

Safran et al. does not describe or suggest a projection system including a plurality of displays arranged adjacent to each other to form a screen, a plurality of projectors, one corresponding to each display of the plurality of displays, wherein each projector includes a lens, and a mask assembly disposed between and surrounding each lens of the plurality of projectors and the corresponding plurality of displays. Rather, Safran et al. only describes a multi projector system in which output from a plurality of projectors is projected onto a plurality of corresponding screens. Since, Safran et al. does not describe or suggest a projection system including a plurality of displays arranged adjacent to each other to form a screen, a plurality of projectors, one corresponding to each display of the plurality of displays, wherein each projector includes a lens, and a mask assembly disposed between and surrounding each lens of the plurality of projectors and the corresponding plurality of displays, claim 3 is patentable over Safran et al.

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Keelan et al. describes an external aperture on a lens of a slide projector (see, Keelan et al. at FIG. column 1, lines 5-7). The size 12 of the external aperture 10 on the lens controls center to edge sharpness uniformity of an individually projected image (see, Keelan et al. at FIG. 1 and column 2, lines 36-47).

Keelan et al. does not describe or suggest a projection system including a plurality of displays arranged adjacent to each other to form a screen, a plurality of projectors, one corresponding to each display of the plurality of displays, wherein each projector includes a lens, and a mask assembly disposed between and surrounding each lens of the plurality of projectors and the corresponding plurality of displays. Rather, Keelan et al. is not applicable to a multi-projector system since this reference only teaches an external aperture on a lens of a slide projector in which the size of the external aperture on the lens controls center to edge sharpness uniformity of an individually projected image. Since, Keelan et al. does not describe or suggest a projection system including a plurality of displays arranged adjacent to each other to form a screen, a plurality of projectors, one corresponding to each display of the plurality of displays, wherein each projector includes a lens, and a mask assembly disposed between and surrounding each lens of the plurality of projectors and the corresponding plurality of displays, claim 3 is patentable over Keelan et al.

Yamanaka describes a multi projector device (see, Yamanaka at column 1, lines 8-11). In Yamanaka, output from a plurality of projectors 1 is combined onto a single screen 3 (see, Yamanaka at FIGS. 2 and 14 and column 8, lines 15-21). Sheet interceptors 5 are positioned to intercept only portions of the light paths output from the plurality of projectors 1 (see, Yamanaka at FIG. 2 and column 8, lines 23-30).

Yamanaka does not describe or suggest a projection system including a plurality of displays arranged adjacent to each other to form a screen, a plurality of projectors, one corresponding to each display of the plurality of displays, wherein each projector includes a lens, and a mask assembly disposed between

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and surrounding each lens of the plurality of projectors and the corresponding plurality of displays. Rather, Yamanaka only teaches sheet interceptors positioned to intercept only portions of the light paths output from a plurality of projectors onto a single screen. Since, Yamanaka does not describe or suggest a projection system including a plurality of displays arranged adjacent to each other to form a screen, a plurality of projectors, one corresponding to each display of the plurality of displays, wherein each projector includes a lens, and a mask assembly disposed between and surrounding each lens of the plurality of projectors and the corresponding plurality of displays, claim 3 is patentable over Yamanaka.

Furthermore, since Safran et al. only describes a multi projector system in which output from a plurality of projectors is projected onto a plurality of corresponding screens, Keelan et al. is not applicable to a multi-projector system since this reference only teaches an external aperture on a lens of a slide projector in which the size of the external aperture on the lens controls center to edge sharpness uniformity of an individually projected image and Yamanaka only teaches sheet interceptors positioned to intercept only portions of the light paths output from a plurality of projectors onto a single screen, the combination of these references does not describe or suggest applicant's arrangement recited in claim 3. In particular, claim 3 describes a projection system including a plurality of displays arranged adjacent to each other to form a screen, a plurality of projectors, one corresponding to each display of the plurality of displays, wherein each projector includes a lens, and a mask assembly disposed between and surrounding each lens of the plurality of projectors and the corresponding plurality of displays. Thus, claim 3 is patentable over the combination of these references.

Claim 4 depends from claim 3. For the same reasons as stated above for claim 3, claim 4 is also patentable over Safran et al. in view of Keelan et al and further in view of Yamanaka.

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CONCLUSION

Thus, the applicants submit that none of the claims, presently in the application are obvious under the provisions of 35 U. S. C. § 103. Consequently, the applicants believe that all of the claims are presently in condition for allowance. Accordingly, both reconsideration of this application and its swift passage to issue are earnestly solicited.

If, however, the Examiner believes that there are any unresolved issues requiring adverse final action in any of the claims now pending in the application, it is requested that the Examiner telephone Ms. Patricia A. Verlangieri, at (609) 734-6867, so that appropriate arrangements can be made for resolving such issues as expeditiously as possible.

Respectfully submitted,


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